Title	Scientific Performance Profile Based on Preschool's Apps-Aided Basic Scientific Process Skills Proficiency Patterns
Author	Mohd Amerul Akmal Mohd Yunos[1*], Noor Azean Atan[2], Norazrena Abu Samah[3], Mohd Nihra Haruzuan Mohd Said[4], Hasnah Mohamed[5]
Abstract	Integration of apps technology in learning process today is no longer seen as an unusual phenomenon with particular to early childhood education. The ability of this technology to shape student interests towards learning process is deemed as a learning development pattern for students particularly in the stage of childhood education. Therefore based on this scenario, two main research objectives are recognized i.e. to identify patterns of student scientific process skills aided by apps technology and thereon to identify student level of proficiency profile based on the patterns of preschool's basic scientific process proficiency on the basis of collaborative learning strategy in authentic learning environment. Three research instruments are produced i.e. AKSES Application, marking rubrics of student basic scientific process skills proficiency as well as pre and post test to address the research objectives based on collaborative learning strategy in authentic learning environment. The quasi-experimental design is applied on 25 preschool students from a controlled group and 25 preschool students from a treatment group that are selected based on quota sampling technique. Data analysis findings of the research through Mann-Whitney U Test found significant impact towards both groups with significant value (P value) = 0.000. Hence, it can be concluded that there is a significant difference in the post-tests for both controlled and treatment groups with P value < 0.05. From the findings of the analysis, the learning proficiency profile based on the patterns of preschool's basic scientific process skills is produced, whereby the differences of proficiency levels in a number of student clusters are demonstrated.